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Title: Non-volatile transistor memory array incorporating read-only elements with single mask set

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A transistor memory array, comprising:

a first plurality of non-volatile user programmable memory cells each including a nonvolatile memory transistor and a first select transistor; and

a second plurality of mask programmed single conductive layer electrode read-only memory cells each including a mask programmed memory transistor and a second select transistor, the non-volatile memory cells and a [[the]] read-only memory cells having the same footprint within a single memory array.

2. (Cancelled)

- 3. (Previously Presented) The memory array of claim 1 wherein said footprint has a longitudinal dimension and a width dimension that are the same for both the first and second pluralities of memory cells, with the respective first or second select transistor and memory transistor having a shared electrode in each memory cell.
- 4. (Previously Presented) The memory array of claim 1 wherein the read-only memory cells include cells having transistors with substrates having open channels and cells having transistors with substrates having shorted channels.
- 5. (Previously Presented) The memory array of claim 1 wherein the non-volatile memory cells have two poly layers and the read-only memory cells have one poly layer.
- 6. (Previously Presented) The memory array of claim 1 wherein the second plurality of readonly memory cells is grouped into rows.
- 7. (Previously Presented) The memory array of claim 6 wherein said group of rows of read only memory cells has a first subgroup of transistors in at least one row in a first logic state.

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8. (Currently Amended) The memory array of claim 7 wherein said group of rows of read-only memory cells has a second subgroup of transistors in <u>the</u> at least one row in a second logic state.

- 9. (Currently Amended) The memory array of claim 4 wherein the channels in the transistors with substrates having open channels and in the transistors with substrates having shorted channels in the read-only memory cells are defined by a buried depletion implant in said substrate, the extent of the implant defining the open and shorted channels.
- 10. (Previously Presented) The transistor array of claim 1 wherein said non-volatile memory cells have EEPROM transistors.

11. - 19. (Canceled)

20. (Withdrawn) A transistor memory array comprising:

a plurality of memory cells all having the same areawise footprint including first memory cells having a user programmable EEPROM transistor, second memory cells having a mask programmed read only memory transistor in a first logic state, and third memory cells having a mask programmed read only memory transistor in a second logic state.

- 21. (Withdrawn) The transistor memory array of claim 20 wherein each memory cell has a select transistor communicating with the memory transistor.
- 22. (Withdrawn) The transistor memory array of claim 20 wherein said read only memory transistors are in a row.
- 23. (Withdrawn) The transistor memory array of claim 20 wherein the memory cells having a read only memory transistor in a first logic state have a permanently open channel.

- (Withdrawn) The transistor memory array of claim 20 wherein the memory cells having a 24. read only memory transistor in a second logic state have a permanently shorted channel.
- (Withdrawn) A transistor memory array comprising diverse memory cells in a memory 25. array all having the same areawise footprint, a first group of memory cells being user programmable and a second group of memory cells being mask programmed.
- (Withdrawn) The memory cell of claim 25 wherein said diverse memory cells comprise 26. non-volatile memory transistors and read only memory transistors.
- (Withdrawn) The memory array of claim 26 wherein said read only memory transistors 27. comprise a first group of transistors in a first logic state and a second group of transistors in a second logic state.
- (Withdrawn) The memory array of claim 27 wherein each of the memory transistors in 28. said first group is in a first common row and each of the memory transistors in the second group is in a second common row.
- (Withdrawn) The memory array of claim 25 wherein each memory cell comprises a 29. memory cell and a select transistor.
- (Withdrawn) The memory array of claim 27 wherein the first group of memory 30. transistors has open channels and the second group of memory transistors has shorted channels.
- 31. (New) The memory array of claim 1 comprising a second plurality of non-volatile user programmable memory cells.